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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,735	05/18/2000	Lieven DeVeylder	2283/301	1507

7590 02/25/2004

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UNIONDALE, NY 11553

EXAMINER

COLLINS, CYNTHIA E

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/574,735

Applicant(s)

DEVEYLDER ET AL.

Examiner

Cynthia Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,5,7-11,14,17,21,24,25,27,30,36-41,43-45,47-50 and 52-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,5,7-11,14,17,21,24,25,27,30,36-41,43-45,47-50 and 52-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The amendment filed November 19, 2003, has been entered.

Claims 1, 3-4, 6, 12-13, 15-16, 18-20, 22-23, 26, 28-29, 31-35, 42, 46, 51 and 58-59 are cancelled.

Claims 2, 5, 7-11, 14, 17, 21, 24-25, 27, 30, 36-41, 43-45, 47-50 and 52-57 are currently amended.

Claims 2, 5, 7-11, 14, 17, 21, 24-25, 27, 30, 36-41, 43-45, 47-50 and 52-57 are pending and are examined.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

All previous objections and rejections not set forth below have been withdrawn.

Claim Rejections - 35 USC § 112

Claims 2, 5, 7, 11, 14, 17, 21, 25, 27, 30, 36, 54 and 55, and claims dependent thereon, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection. Currently amended claims 2, 5, 7, 11, 14, 17, 21, 25, 27, 30, 36, 54 and 55 recite the limitation "or any of the aforementioned amino acid sequences having one mismatch at any position". This limitation does not find support in the specification and therefore constitutes new matter. The Office notes Applicant's referral, at page 13 of the

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amendment filed November 19, 2003, to page 56 of the application and Table 2 as providing support for this limitation, but the Office maintains that page 56 of the application does not describe the motifs, and the application further does not contain a Table 2.

Claims 2, 5, 7, 11, 14, 17, 21, 25, 27, 30, 36, 54 and 55, and claims dependent thereon, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a written description rejection.

Currently amended claims 2, 5, 7, 11, 14, 17, 21, 25, 27, 30 and 36 are directed to the use of a nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor which comprises an amino acid sequence of at least one of SEQ ID NOS:34, 35 or 36. Currently amended claims 54 and 55 are directed to the use of a nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor which further comprises the consensus amino acid sequence as set forth in any one of SEQ ID NOS:37, 38 or 39.

In contrast, the specification at page 53 describes all plant cyclin-dependent kinase inhibitors known in the art to date as comprising in their carboxy-terminus three conserved amino acid motifs of SEQ ID NOS:34, 35 and 36. The specification at page 53 further describes all plant cyclin-dependent kinase inhibitors known in the art to date as comprising in their amino-terminus either i) three conserved amino acid motifs of SEQ ID NOS:37, 38 and 39, or ii) one conserved amino acid motif of SEQ ID NOS:37, or iii) none of the conserved amino acid

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motifs of SEQ ID NOS:37, 38 or 39. Accordingly, Applicant has described the structural features unique to the genus “plant cyclin-dependent kinase inhibitor” as being the three carboxy-terminal conserved amino acid motifs of SEQ ID NOS:34, 35 and 36, and optionally one amino terminal conserved amino acid motif of SEQ ID NO:37 or three amino terminal conserved amino acid motifs of SEQ ID NOS:37, 38 and 39. Applicant has not described plant cyclin-dependent kinase inhibitors comprising an amino acid sequence of at least one of SEQ ID NOS:34, 35 or 36, or plant cyclin-dependent kinase inhibitors further comprising the consensus amino acid sequence as set forth in any one of SEQ ID NOS:37, 38 or 39.

Claims 2, 5, 7, 11, 14, 17, 21, 25, 27, 30, 36, 54 and 55, and claims dependent thereon, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2, 5, 7, 11, 14, 17, 21, 25, 27, 30, 36, 54 and 55 are indefinite in the recitation of “or any of the aforementioned amino acid sequences having one mismatch at any position”. It is unclear how an amino acid sequence could have a mismatch, as the term mismatch ordinarily refers to improperly paired nitrogenous bases in a double-stranded nucleic acid sequence.

Double Patenting

Claims 2, 5, 7-11, 14, 17, 21, 24-25, 27, 30, 36-41, 43-45, 47-50 and 52-57 remain provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9, 13-19, 21-23, 43-48 and 51-52 of copending Application No. 09/526597, for the reasons of record set forth in the office action mailed June 17, 2003.

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The Office acknowledges Applicant's statement filed November 19, 2003 submitting that a terminal disclaimer will be submitted upon allowance of the claims presently under consideration in this application. (reply page 21)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Remarks

No claim is allowed.

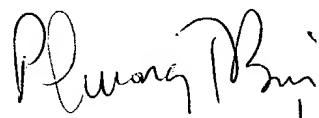
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Collins whose telephone number is (571) 272-0794. The examiner can normally be reached on Monday-Friday 8:45 AM -5:15 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (571) 272-0804. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CC


PHUONG T. BUI 2/20/04
PRIMARY EXAMINER